LIBRARY
TECHNICAL REPORT SECTION
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA 93940

A0772414

TECHNICAL REPORT

December 1973

ORGANIZATIONAL PRACTICES AND THE DECISION TO REENLIST

David G. Bowers

Institute for Social Research University of Michigan Ann Arbor, Michigan

This research was funded by the Office of Naval Research, Organizational Effectiveness Research Programs, under Contract No. NO0014-67-A-0181-0048. Reproduction in whole or in part is permitted for any purpose of the United States Government. This document has been approved for public release and sale; its distribution is unlimited.

12. SPONSORING MILITARY ACTIVITY

Office of Naval Research, Organizational Effectiveness Research Program

13. ABSTRACT

This report contains the results of multiple regression analyses of the intention to reenlist, employing organizational practices and preferences predictors at the individual, group, and organizational (ship and shore station) levels. The results indicate that a small number of measures may be employed to generate a six-category situational favorability index, for which reenlistment intention percentages vary from two (least favorable situation) to 66 (most favorable).

DD FORM 1473 (PAGE 1) S/N 0101-807-6811

Security Classification

A-31408

Retention rate Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge economic job factors non-economic job factors	WT ROLE
Retention rate Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	WT ROLE
Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
Reenlistment intention Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
Organizational practices supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
supervisory leadership organizational climate satisfaction military job opportunity multiple regression job challenge	
organizational climate satisfaction military job opportunity multiple regression job challenge	
satisfaction military job opportunity multiple regression job challenge	
military job opportunity multiple regression job challenge	
multiple regression job challenge	
multiple regression job challenge	
job challenge	
economic job factors non-economic job factors	
economic job factors non-economic job factors	
non-economic job factors	
	4
	1.
	{ · (

As discussion at the national level turns to the consequences thus far of having ended military conscription and returned to the historically more typical situation of the all-volunteer force, attention quite naturally gravitates toward recruitment successes and difficulties.

A number of reasons seem to account for this, among them the highly evident displays of intensified recruiting efforts, the fact that the armed forces draft has served primarily as a means of obtaining new manpower increments, not of keeping the already skilled, and the more immediate visibility of impact of an all-volunteer condition upon early steps in the military service sequence (such as initial enlistment).

Although understandable, this focus omits an equally fundamental aspect of the problem, retention of trained manpower. Despite its simplicity and obviousness, the point is an important one since, in an all-volunteer setting, the Navy's recruitment problems, whatever they may be, are multipled by its retention problems. Competing as it now must do with a large array of civilian occupations into which young men (and women) might go, it must either retain its trained and experienced manpower or endure the expense and disruption of constantly replacing large numbers who leave.

The problem looms nowhere larger than among first-term enlisted men. Both folk wisdom and concrete data suggest that a high proportion of enlisted Navymen in their first term of service intend to, and do, leave the Navy at the end of their enlistment.

The present report proposes to build upon two earlier efforts and to explore in some depth the correlations to reenlistment intention of organizational practices and preferences.

Methods

Data from the Navy Sample were collected from both ship and shore stations between November 1972 and February 1973.* The surveys were personally administered by personnel from the Institute for Social Research.

Ships were included from both the Atlantic and Pacific Fleets.

Individuals in the sample were chosen in proportion to the number of personnel assigned to each ship type. For example, if 35 per cent of the personnel assigned to ships were aboard destroyers, 35 per cent of the individuals in the sample were selected so as to come from destroyers. Ships themselves were chosen largely on the basis of availability, with the specific ship selection occasionally influenced by the logistics of moving Organizational Development Research Program Staff from one ship to another. As may be imagined, weather was also an occasional element in determining whether the necessary connections between two selected ships could be made.

For at least two reasons, an effort was made to maximize in the sample as many ships as possible currently deployed away from their home ports. First, larger proportions of the billets are in fact filled on deployed ships than on ships in port. Second, personnel aboard deployed ships are more likely to have had a period of exposure to the organizational variables being measured. For these reasons, more than half of

A detailed description of the sampling techniques as well as a description of the fit of the samples to their respective populations is presented in an accompaning technical report: A Methodology for the Studies of the Impact of Organizational Values, Preferences, and Practices on the All-Volunteer Navy (Michaelsen 1973).

the ships sampled were deployed at the time of the administration of the survey.

Shore stations were included from eight shore station commands

(Atlantic Fleet, Pacific Fleet, Training, Materiel, Personnel, Medicine and Surgery, Security, and Communications) and from the CNO staff.

Individuals in the sample were chosen in proportion to the number of personnel assigned to each command. Specific shore stations were randomly selected from those available in four geographical areas—East Coast, Memphis-Pensacola, San Diego, and Hawaii.

Personnel actually surveyed aboard a particular site were members of intact organizational subunits, consisting of work groups related to one another through supervisors who are, at the same time, a superior of the group they supervise and a subordinate in the group immediately above. In this fashion, one may conceive of the organization as a structure of such overlapping groups, a pyramid of interlaced pyramids. For purposes of identifying and selecting intact units for the study's analytic aims, the sampling basis was designated as a "module," by which is meant a "pyramid" of groups three echelons tall. Thus, members from four adjacent levels were included, with the module head defined as the person at the apex of that particular three-tier pyramid. Yet another criterion for the selection of a module was that the person at the apex (the module head) had been at his current assignment for at least three months.

A list of all personnel at a site who met the criteria for module head was obtained from manpower authorization documents and from organizational charts, and from these rosters an appropriate number of

module heads were randomly selected. If a particular module did not provide a large enough sample of personnel required for the particular site, another module head was selected by the same method. Thus, the sample from a site consisted of one or more modules.

This sampling procedure resulted in data collection from 38 different Navy sites and a total sample size of 2522 Navy personnel.

Statement of the Problem

An earlier technical report explored the relationship of personal characteristics, such as age and education, to values and preferences of Navymen and civilians concerning the work setting (Bowers, 1973). The tonclusions of that report form a suitable starting point for the present study:

- 1. Younger persons are less willing to accept autocratic, directive management practices than their elders are, and young Navymen are the least accepting of all. Not only does this show up in the latter's exceptionally low scores on the authoritarianism measure, it shows up as well in a cluster of other preferences. More even than their civilian age counterparts, young Navymen attach importance to being able to control their personal lives, to not being "bossed," to having adequate free time, and to not being hemmed in by long-standing rules and regulations which no one seems able to explain.
- 2. Self-selection (operationalized in the form of expressed intent to reenlist) bears considerable relationship to preferences for leadership behavior from supervisor and peers. As originally expressed, this could be envisaged as taking the form: those who do not want the delineated characteristics have opted out

5

of the Navy. Yet it is a two-edged sword, as easily taking the form: those who do want it have remained. Although "tracking" as a methodological explanation finds little clear support, reenlistment intention relates, in net, as strongly to actual leadership received as it does to preference. The more parsimonious explanation, therefore, is that intention to remain in the Navy is in part a function of the leadership behavior which one receives from one's supervisor and coworkers, and that one sets his preferences in part in relation to his experience base.

- Rank also emerges as an important predictor of values and preferences, particularly those values and preferences with a more "mission-oriented" character: desire for goal-emphasis, desire for a challenging job, and importance attached to serving one's country. These effects remain even after the effects of age, education, and self-selection have been removed. As such, they must reflect at least in part the added commitment that comes with higher status and perceived greater centrality to the organization and its purposes. Little more of a definitive kind can be said at this point concerning rank and its impact, although future analyses may well shed additional light. Among the points to be kept in mind, however, are the following:
 - a. Rank apparently has an effect over and above sheer self-selection, education, and age.
 - b. By virtue of what its statistical removal in part does to the age curve, rank in the Navy apparently

has an impact (of a positive kind) which status differences do not obviously produce in civilian life.

4. Age has, in and of itself, additional impact. With greater age comes the desire for closer collaborative relations with one's peers and for more effective teamwork.

Yet another technical report in the same series reported statistically significant correlations between organizational practice indices and actual reenlistment rates of Navymen aboard ships contained in the survey sample (Drexler & Bowers, 1973).

The larger study of which the present effort is a part contains in its questionnaire instrument a question dealing with reenlistment intention at the end of the current term:

What do you plan to do when you complete this enlistment?

- 1. Reenlist and make the Navy a career
- 2. Reenlist or extend but undecided about making the Navy a career
- Reenlist or extend but do not intend to make the Navy a career
- 4. Return to civilian life
- 5. Retire

Paired with an additional question which asks about the respondent's present enlistment or extension status, it is possible to examine the extent to which expressed intention to reenlist is a function of other conditions, practices or preferences expressed by the respondent in other

parts of the same survey instrument. In general terms, the strategy to be employed involves selecting from the total sample those 1080 cases comprising only first-term enlisted personnel and then to employ multiple regression techniques in an attempt to identify both the extent to which organizational practices and preferences account for reenlistment intention and the most parsimonious array of such variables which account at the individual, group and organizational levels for variance in the expressed intention to reenlist or not. The basic analysis strategy is outlined in Table 1, where it is depicted as occurring in five stages at three levels of aggregation (individual, work group, and total organization).

Stage I contains a single step viewed as necessary for establishing at least reasonable grounds for assuming the validity of the reenlistment intention measure from the questionnaire. Because retention statistics for ships contained in the overall study sample were available (having been used in an earlier technical report: Drexler & Bowers 1973), it was possible to correlate the mean reenlistment intention score for ships, calculated for first-term enlisted personnel only, with first-term actual retention rates for those same ships. If in fact, reenlistment intention is a reasonable indicator of actual retention rate, one would expect a significant and sizeable correlation. Stated otherwise, if a person's expressed intention to remain in the Navy or to leave it is a reasonably accurate forecast of his decision to do so, then one ought find a statistically significant relationship between the average of such expressed intentions and the actual retention rate for operating units. This was in fact done. For purposes of the present study, category 5

TABLE 1

STAGES IN THE BASIC ANALYSES

			8	
	Organizational	Correlate mean reenlistment intention with actual retention rates (first-termers only) by ship.	Compute zero-order correlations coefficients to Reenlistment Intention for all predictors for the 43 organizations (ships and shore stations) represented in the sample.	1 1 1
Levels And Procedures	Group	1 1 1	Divide total array of groups into two random halves, run multiple regressions for each, predicting Reenlistment Intention (group mean) from combination of group means on all variables within a cluster, for each cluster separately. Replicate for (a) all groups, and (b) all groups greater than 1.	Select best predictors within each cluster and combine into an overall multiple regression for each random half, for groups greater than 1.
	Individual		Divide total sample of first-term enlisted men into two random halves, run multiple regressions for each, predicting Reenlistment Intention from combination of all variables within a cluster, for each cluster separately.	Select best predictors within each cluster and combine into an overall multiple regression for each random half.
Analysis Stage		Stage I	Stage 2	Stage 3

Table I Continued

	Organizational	 	1 1
Levels And Procedures	Group	Run multiple regressions for each random half, combining all 31 predictors, regardless of cluster (to check for suppressor effects.)	Select next-stage best predictors and re-run the resulting limited list for both random halves and for the total sample.
	Individual	Divide total sample into two alternative random halves, run multiple regressions for each, combining all 31 predictors, regardless of cluster (to check for suppressor effects.)	Select next-stage best predictors and re-runs the resulting limited list for all four random halves and for the total sample.
Analysis Stage		Stage 4	Stage 5

of the Reenlistment Intention measure--"retire"--was eliminated. The remaining response categories then formed a crude scale, running from intention to make the Navy a career to intention to return to civilian life.

The Pearson Product Moment correlation of reenlistment intention with actual reenlistment rates of first-term Navymen by ship is .76 and directionally appropriate: that is, reenlistment rates are higher aboard ships whose first-term enlisted personnel express on the average a more frequent intention to remain in the Navy.

This provides, therefore, some basis for assuming that reenlistment intention as measured by the questionnaire item is a reasonable approximation of what actually transpires in Navy units. In the analyses to be pursued for first-term personnel as individuals, as collectivities in the form of work groups, or as whole organizational units on shore as well as aboard ship, it would appear to suffice.

As the further entries in Table 1 indicate, the basic procedure to be followed in this present report in analyses at the individual and group levels is that of multiple regression. The statistical literature suggests two potential problems of which the researcher must be wary:

- The tendency of multiple regression procedures to capitalize upon random error.
- 2. The tendency of the obtained weights to be to some extent sample-unique.

The first problem is presumably handled by the procedure of correcting obtained multiple correlation coefficients for shrinkage (McNemar, 1969).

Taking account of the propensity for findings to be sample-unique is a bit more complicated. It becomes a problem principally to the extent that predictors are selected for inclusion in the multiple regression from a pool of predictors on the basis of their correlation with the criterion. Several variations upon some form of cross-validation procedure are suggested within the statistical literature. The strategy employed within the present report is that of subdividing the total array of cases into randomly selected halves and replicating the analysis.* Thus, at the individual level, the total 1080 cases are, for these purposes, randomly divided into two sets of 540 each. In certain instances this procedure has been done twice. After the initial drawing, all cases were replaced and the process repeated. The result, therefore, was four random sets of 540 cases each.

At the group level, the same basic procedure has been followed, namely that of dividing the total array of groups into two random halves. The procedure becomes a bit more complicated at the group level, however, because our sample, like the Navy, contains a number of groups whose membership consists of a single person (that is, a "group" made up of the single deputy reporting to a superior, as, for example, the situation which obtains between a Commanding officer and his Executive officer). Thus, of the 266 groups represented in the total sample, 87 contain but a single person. 179 groups contain two persons or more. In line with the procedure described in relation to individual-level analyses, both the total array (266 groups) and the subset consisting of groups with membership greater than one (179 groups) have been randomly divided into two half-samples and the analysis replicated for each. At the individual level,

^{*} In addition, the analyses have been "double cross-validated," in that the weights derived from each sample have been used to generate predicted scores for the other sample, which scores have then been correlated with actual reenlistment intention measures for that other sample. These results are presented as Appendix B together with another indicator of stability, the simple intercorrelation of beta weights across samples.

the number of cases (ships and shore stations) is too small to permit either replication within random halves or the use of a multiple regression procedure. For this reason analyses at the organizational level take the form of zero-order Product Moment correlation coefficients for the total sample of 43 ship or shore station units.

As Table 1 indicates, for the individual and group analytic levels the second stage involves multiple regression analyses in which the predictors are various clusters of organizational practice variables (e.g., organizational climate, economic job factors, etc.) and the criterion or dependent variable is reenlistment intention. Multiple regressions within this stage were conducted separately for each of the five conceptual clusters into which the organizational practice variables may be arrayed:

Organizational Climate
Intragroup Interpersonal Processes
Non-economic Job Factors
Economic Job Factors
Life Style Factors

From this Stage 2 analysis, best predictors within each cluster were then selected and combined into an overall multiple regression for each random half. Because there were grounds for suspecting that certain variables in an array as large as this might act as suppressors, Stage 4 in Table 1 indicates that the next step at both the individual and group levels was to combine all 31 predictors into a single large multiple regression, predicting, as before, the reenlistment intention criterion.

Stage 5 of the basic analyses consisted of selecting next-stage best predictors from the analyses run up to this point and then rerunning this

resulting limited list for the random half samples and for the total sample of respondents or groups.

Multiple Regression Results at the Individual Level

Table 2 presents the results of Stages 2 through 5 of the analysis strategy conducted at the individual respondent level. Several facts are observable from the data there presented. First, comparing Stages 2 and 4, we find little reason for believing that combining all 31 predictors into a single large regression substantially raises the overall level of the multiple correlation coefficient corrected for shrinkage. For the two random half samples whose data are listed in the Stage 4 section of the table, the adjusted multiple correlation coefficients using all 31 predictors and .38 and .50 respectively, whereas, the separate cluster coefficients (Stage 2) range from .23 to .38. One must conclude from this fact, therefore, that there exists considerable overlap among the conceptual categories separately analyzed in Stage 2.

Turning to Stage 2 itself, we find that the first three predictor categories--Organizational Climate, Intragroup Interpersonal Processes and Non-economic Job Factors--once corrected for shrinkage (i.e., numbers of cases in relation to numbers of predictors) do similarly and moderately well in predicting the criterion and do, on the whole, a better job of predicting that criterion than do Economic Job Factors or Life Style Factors similarly corrected for shrinkage. In each of the five categories, no more than four of the measures in the categories appear to do the job of the entire array. Directionality is in general appropriate in that, with two exceptions, all of the statistically significant beta weights are

Table 2
RESULTS OF MULTIPLE REGRESSIONS, BY ANALYTIC STAGE,
(INDIVIDUAL LEVEL)

	Stage	4
Sample 2	Sample 3	Sample 4
Beta p	Beta p	Beta p
.35, .34	.44, .38	.55, .50)
(N = 522)	(N = 498)	(N = 492)
14 .01	02	16 .003
1203	09	02
	[0.	14 .003
.39, .37)		
(N = 528)		
10.	12	01
- 60		1
.0.	03	1.03
90	01	.04
,		08
.06	.0001	

Table 2 (continued)

	Stage	2	Stage	e 4
Measures	Sample 1	Sample 2	Sample 3	Sample 4
	Beta p	Beta p	Beta	Beta p
Non-Economic Job Factors	(R, $R_{adj} = .40$, $.38$ (N = 529)	.40, .38		
Job Challenge No One to Boss Me Lots of Free Time Opp. to Control Life No Endless Referrals No Red Tape Rules Not Constraining Prestigious Job Friendly People	16 16 15 03 04 08		08 09 07 04 07 00	03 03 200001 06 09
Economic Job Factors Good Pay Steady Employment Good Fringe Benefits	(R, $R_{adj} = .24$, $.23$ (N = 533) 14 .002 .04	.30, .29) (N = 532) 22 .0001 .16 .0001 12 .01		02 .09 .02
Life Style Factors Theory X Opp. to Serve Country Opp. to Make World Better Permits Stay One Place	(R, $R_{\alpha dj} = .28$, $.27$ (N = 532) 06 08 21 .0001	.32, .31) (N = 528) 08 01 270001 08	06 10 03	.030813 .003

Table 2 (continued)

Sample 1 Sample 2 Beta p Beta p (R, $R_{adj} = .43, .40$	Stage 3	
Beta p Beta p (R, $R_{adj} = .43, .40$] Sample	
(R, $R_{adj} = .43$, $.40$	Beta	
1cy08040808080808080925000129	.40	
rter	= N)	
tter100114 .002 .0303030303030303030303030808080808080808080808080808080808080925 .000129		
etter12 .0118 .000103070809090909090909090925 .000129	.03	
ge Benefits00080925000129000129000129000129	18	
Sample 1 Sample 2 Sample Beta p Beta p Beta (R, R _{adi} = .38, .38 .43, .45 .37, (N = 537) (N = 533) (N = .23 .000125 .000129	.03	
Sample 1 Sample 2 Sample 8 Beta p Beta p Beta (R, R _{adv} = .38, .38 (N = 537) (N = 533) (N =23 .000125 .000129	Stage 5	
Beta p Beta p Beta p Beta (R, $R_{adj} = .38$, $.38$ $.43$, $.45$ $.37$, $(N = 537)$ $(N = 533)$ $(N =10 .0310 .040323 .000125 .000129$] Sample	4 Total
(R, $R_{adj} = .38$, $.38$.43, $.45$.37, (N = 537) (N = 533) (N =10 .0310 .0423 .000125 .000129	Beta p	p Beta p
(N = 537) $(N = 533)$ $(N = -10 .03 .001 .03 .0001 .03 .000129$.38 .43, .45	.45 .40, .40)
10 .0310 .04 23 .000125 .0001	(N = 533) (N	(N = 1070)
	.0310 .040315	.000110 .003
.000.	20 .000113 .003	/

 1 The significance levels of the β are computed on the basis of "t" which is the quotient of β divided by the standard error.

negative: that is, the greater the presence of the factor as named, the more likely it is that the respondent intends to reenlist. Furthermore, the two exceptions in which the coefficient is significant and positive are instances in which the relationship itself is not replicated in the other half-sample.

The Stage 3 section of the table shows the results of combining the best predictors from the five separate categories into a single multiple regression for each of the two half-samples. As is apparent from the data, the overall coefficient remains approximately the same, perhaps rising slightly as one might expect by combining predictors from different categories. Yet within each of the two half-sample regressions, only a handful of predictors produce statistically significant beta coefficients.

From the Stage 3 and Stage 4 results, a much more limited array of predictors were selected, specifically, three: Human Resources Primacy (a measure from the Organizational Climate array), Satisfaction (a measure from the Intragroup Interpersonal Process array), and Opportunity to Control Personal Life (from the Non-economic Job Factors array). As the four replicated half-samples and the total sample replication indicate, little predictability is lost by limiting the regression to these three predictors. At the individual level, therefore, we would conclude that the organizational practice measures account for approximately 16 per cent of the variance in individual reenlistment intention and that three measures do the work of the total array, that is, Human Resources Primacy-the extent to which the individual feels that that portion of the organization in which he lives and works attaches importance to people as human resources, Satisfaction--the extent to which he is in general satisfied

with the Navy, with his job, with his supervisor, with his fellow Navymen in the basic work group, his advancement opportunities, and the <u>Opportunity</u> to Control his Personal Life.

Multiple Regression Results at the Group Level

As in the case of results at the individual level, results presented in Table 3 at the group level indicate somewhat more substantial relationships produced by variables within the first three conceptual categories, that is Organizational Climate, Intragroup Interpersonal Processes and Non-economic Job Factors. Somewhat lower, and once more similar, findings occur with regard to Economic Job Factors and Life Style Factors. Furthermore, the results, although clear when only groups with memberships larger than one are the subject of analysis, are nearly as clear when all groups are encompassed. Unlike results at the individual level, Stage 4 results at the group level (that is, the effect of combining all 31 predictors in a single multiple regression) indicate a fairly substantial gain in the overall coefficient.

As in the early analysis, however, little is lost and somewhat less gained by combining a more limited array of best predictors from the several categories into a single and somewhat more limited, similarly parsimonious prediction scheme.

The Stage 5 results at the group level indicate that when an even more limited array of predictors are selected, two predictors in combination (Opportunity to Control Personal Life and having Friendly People to work with) account for approximately 25 per cent of the variance.

Table 3
RESULTS OF MULTIPLE REGRESSIONS
BY ANALYSIS STAGE
(GROUP LEVEL)

		STAGE 2			
	Groups Greater	r Than J	All Groups	roups	
Measures	Sample 1	Sample 2	Sample 1	Sample 2	-
	Beta¹ p	Beta p	Beta p	Beta	
Organizational Climate	(R, $R_{adj} = .51$, .48	.55	.37	. 55	.53)
	(N = 93)	(N = 86)	(N = 134)	(N = 132)	
Human Resources Primacy Communication Flow Motivational Conditions Decision-Making Practices Lower-Level Influence	10 09 24 21	43 .001 .19 .05 27 .02	13 05 15 06	4200 02 11	.0001
Intra-Group Interpersonal Processes	(R, R _{adj} = .66, .61	. 54	.38	. 52	.47)
	(N = 93)	(N = 86)	(N = 135)	(N = 135)	
Supv. Support Supv. Goal Emphasis Supv. Work Facil. Supv. Inter. Facil. Peer Support Peer Goal Emphasis Peer Work Facil. Group Process Satisfaction	57 .0001 .38 .06 11 .12 .21 21 34 .02 .33 .05	42 .0003 .42 .02 .29 .06 11 .01 23 21	370001 .04 .02 .06 .13 06	45 15 19 18 10 05 22	

Table 3 Continued

		STAGE	E 2		
	Groups Greater	r Than 1	All	Groups	
Measures	Sample 1	Sample 2	Sample 1	Sample 2	
	Beta p	Beta p	Beta p	Beta	d
Non-Economic Job Factors	(R, $R_{adj} = .66, .62$. 53	.42 .35	. 48	.43)
	(N = 93)	(N = 86)	(N = 134)	(N = 133)	
Job Challenge No One To Boss Me Lots of Free Time Opp. to Control Life No Endless Referrals	26 .02 .04 18 .06 17	22 .06 .15 29 .004 34 .004	04		.03
No Red Tape Rules Not Constraining Prestigious Job Friendly People		01 .04 26 .02	00	03	.03
Economic Job Factors	(R, $R_{adj} = .52, .50$.33	.30 .28	.30	.28)
	(N = 93)	(N = 86)	(N = 134)	(N = 134)	
Good Pay Steady Employment Good Fringe Benefits	35 .001 .18 .05 25 .02	18	13 .19 .02	- 13	.04
Life Style Factors	(R, R _{adj} = .57, .55	1	1	ĺ,	30)
Theory X Opp. To Serve Country Opp. To Make World Better P≘rmits Stay One Place	08 42 10 10 10 10 10	(N = 8b)18 .07 .0230 .0221 .04	05 03 2901	110820	.02

Table 3 Continued

		STAGE 3		
	Groups Greater Than 1	r Than 1	All Groups	sdnc
Measures	Sample 1	Sample 2	Sample 1	Sample 2
	Beta p	Beta	Beta p	Beta
	(R, R _{adj} = .71, .67	. 64	. 53	.72 .69)
	(N = 86)	(N = 93)	(N = 86)	(N = 93)
Human Resources Primacy Lower-Level Influence Supv. Support Supv. Goal Emphasis Job Challenge Lots of Free Time Friendly People Good Pay Opp. To Make World Better	09 08 29003 15 34001 2105	18 .08 .18 15 2402 20	06 .08 .08 .19 17 39002	042524 .05171312

Table 3 Continued

		STAGE 4		
	Groups Greater Than	er Than l	All Groups	sdr
Measures	Sample 1	Sample 2	Sample 1	Sample 2
	Beta p	Beta p	Beta	Beta
Organizational Climate	(R, $R_{adj} = .77, .61$.81		
	(N = 86)	(N = 93)		
Human Resources Primacy Communication Flow Motivational Conditions Decision-Making Practices Lower-Level Influence	.07 .03 .45 .01 29	18 .04 .13 .17		
Intra-Group Interpersonal Processes				
Supv. Support Supv. Goal Emphasis Supv. Work Facil. Supv. Inter. Facil. Peer Support Peer Goal Emphasis Peer Work Facil. Peer Inter. Facil. Group Process Satisfaction	12 24 06 00 30 32 04	36 03 05 16 19 08 30		

Table 3 Continued

		STAGE 4		
	Groups Greater	er Than 1	All Groups	sdno
Measures	Sample 1	Sample 2	Sample 1	Sample 2
	Beta p	Beta	Beta p	Beta p
Non-Economic Job Factors				
Job Challenge No One To Ross Me				
Lots of Free Time		-14		
Upp. 10 Control Lite No Endless Referrals				
No Red Tape Rules Not Constraining				
Prestigious Job Friendly People	30	.05		
Economic Job Factors				
Good Pay Steady Employment Good Fringe Benefits	1007	21 .05 .14		
Life Style Factors				
Theory X Opp. To Serve Country Opp. To Make World Better Permits Stay One Place	2115	15		

Table 3 Continued

		STAGE 5	5		
	Groups Greater Than 1	er Than 1	A11 G	All Groups	
Measures	Sample 1	Sample 2	Sample 1	Sample 2	Total
	Beta p	Beta p	Beta p	Beta p	Beta p
	(R, R _{adj} = .54, .52	23. 85.			.56 .55)
	(98 = N)	(N = 93)			(8 = 179)
Supv. Goal Emphasis Opp. To Control Life Friendly People	.13 33 .0001 40 .0001	.13 31 .002 44 .0002			37 .0001 37 .0001

The significance levels of the ß are computed on the basis of "t" which is the quotient of 3 divided by the standard error.

The Effects of Combining Individual and Group Level Predictors

Thus we arrive, having looked at the individual and group-level multiple regressions, at a very limited array of variables which account for variance predicted by all 31. It would seem likely that the intention to reenlist would be highest among persons who feel that the Navy (at least that portion of it which they experience) attaches considerable importance to people as human resources, who are satisfied with their supervisors and their job in the Navy, who feel that they personally experience considerable opportunity to control their personal lives, and who work in groups in which most persons view relationships as friendly and see persons generally (not simply individually) as having a better than average opportunity to control their personal lives. The converse would also be true--we would expect reenlistment intention to be lowest for those persons who live and work in groups in which most persons perceive that they have little opportunity to control their personal lives, where relationships among Navymen are other than friendly, and who, as individuals, experience a low opportunity to control their personal lives, are dissatisfied generally with the conditions they experience, and feel that that portion of the Navy in which they live and work attaches little or no importance to people as human resources.

In an effort to evaluate the effect of these variables at the group and individual level in combination, first-term enlisted men were assigned coded scores based upon median splits for the five appropriate predictor measures. For those two measures whose effects were visable at the group level (Opportunity to Control Personal Life and Friendly People) individual first-term Navymen were assigned scores of zero if the groups to which they

belong have mean scores which fell at, or below, the median of the distribution of group scores on the measures. They were assigned a score of 1 if their group reflected a mean that fell above the median of group scores on the variable. Thus, at the group level, individuals could accumulate scores ranging from 0 to 2. A similar procedure was followed for the three individual level measures. Individuals were arrayed in order of score; the median score was identified; and individuals at or below the median on any of the three variables were assigned a score of zero. Those above the median were assigned a score of 1. For variables identified as best predictors at the individual level, therefore, an individual member of the sample could accumulate a score ranging from 0 to 3. Combining scores for the group and individual level predictors produced an array of scores from O to 5; for data processing convenience, a constant of 1 was added to each such score, producing categories from 1 through 6, which represent lowest to highest situational favorability on the five measures combined. There was then obtained a frequency and percentage spread for these six categories of Navymen on the reenlistment intention measure.

The results are presented in Table 4. A graphic comparison of the six situational favorability categories on percentage intending to reenlist is presented as Figure 1. The results are dramatic indeed. Combining response categories 1 and 2 on the reenlistment intention measure (those who say that their intention is to reenlist and make the Navy a career, plus those who say they intend to reenlist and possibly make the Navy a career) we find that for category 6, the most situationally favorable, over 54 per cent say that they intend to reenlist. Adding those from response category 3--persons who intend to reenlist but not make the Navy

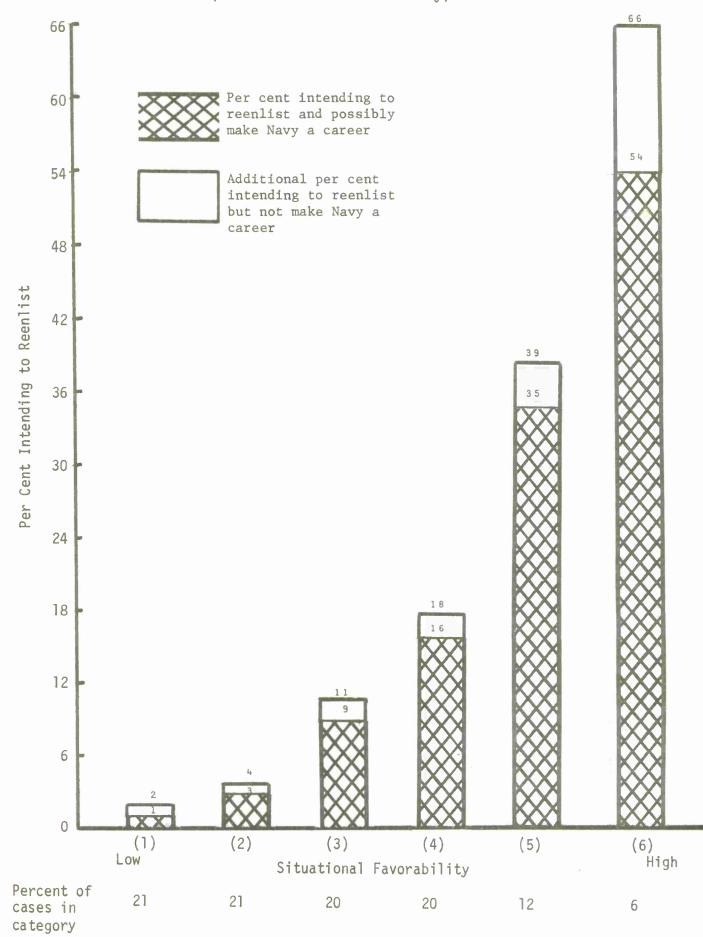
TABLE 4

SITUATIONAL FAVORABILITY AND
REENLISTMENT INTENTION

		Percentages By Situational Favorability Category					
_		(1)	(2)	(3)	(4)	(5)	(6)
	Reenlistment Intention Category						
Reenlist and make Navy a career	(1)	0	1	1	5	9	19
Reenlist but undecided about making Navy a career	(2)	1	2	8	11	26	35
Reenlist but not make Navy a career	(3)	1	1	2	2	4	12
Return to Civilian life	(4)	98	96	89	82	61	34
V		229	223	222	211	129	68

Figure 1

PER CENT INTENDING TO REENLIST BY SITUATIONAL FAVORABILITY CATEGORY (First-Term Enlisted Men Only)



a career--produces results which are even more startling. In the least favorable category no more than two per cent state an intention to reenlist, whereas 98 per cent in this low category state their intention to return to civilian life. The importance of situational favorability, assessed in these terms, is perhaps reinforced by the rather steady progression of percentages intending to reenlist as one moves from least to most situationally favorable categories, rising to a high of 66 per cent in the most favorable category.

Results at the Organizational Level

As mentioned earlier in the report, multiple regression procedures could not be followed at the organizational level principally because of the small number of cases. Zero-order correlations for the 43 ships and shore stations represented in the sample are presented in Table 5 for variables clustered as before. Results at this level reinforce in part the pattern observed at the individual and group levels. Human Resources Primacy as a measure of Organizational Climate displays clearly the strongest relationship to be found in the table. Other measures of organizational climate present a similar pattern at a lower and less statistically significant level. Among Non-economic Job Factors, only two of the "bureaucracy" items present statistically significant relationships-variables which interestingly enough did not emerge as crucial at the individual and group levels. No statistically significant results occur among predictors clustered within the Economic Job Factor or Life Style categories. Results among the Intragroup Interpersonal Processes category present an interesting and at first puzzling pattern. Both measures of

TABLE 5

ZERO-ORDER CORRELATIONS OF PREDICTORS WITH REENLISTMENT INTENTION (ORGANIZATIONAL LEVEL) N = 43 SHIPS AND SHORE STATIONS

Measure	Correlation With Reenlistment Intention			
	r	р		
Organizational Climate				
Human Resources Primary Communication Flow Motivational Conditions Decision-Making Practices	61 34 38 18	.0001 .02 .01		
Intra-Group Interpersonal Processes				
Supervisory Support Supervisory Goal Emphasis Supervisory Work Facilitation Supervisory Interaction Facilitation Peer Support Peer Goal Emphasis Peer Work Facilitation Peer Interaction Facilitation Group Process Satisfaction	.34 .23 .26 .05 .31 .05 .25 03 .30 36	.03 .04 .05 .02		
Non-Economic Job Factors				
Job Challenge No One to Boss Me Lots of Free Time Opportunity to Control Personal Life No Endless Referrals No Red Tape Rules Not Constraining Prestigious Job Friendly People	04 17 .26 19 27 45 51 23 .16	 .003 .001		
Economic Job Factors				
Good Pay Steady Employment Good Fringe Benefits	26 .29 .38			
Life Style Factors				
Theory X Opportunity to Serve One's Country Opportunity to Make World Better Permits Me to Stay in One Place	.15 .15 05 18			

support, supervisory and peer, show marginally significant coefficients that are reverse in direction from those obtained in relation to predictors already studied. The more supportive one's supervisor is seen as being, or one's peers, the more likely it is that first-term enlisted men will report that their intention is to return to civilian life! The group process measure behaves similarly, yet the satisfaction index shows much the same relationship observed in the individual and group level analyses. The most reasonable explanation, one which cannot be explored empirically within the present analysis, is that the supervisors of first-term enlisted men are likely to be themselves relatively young and sympathetic to the essentially civilian or orientation of many of their subordinates and, in fact, provide a degree of support which is greater for those who, in fact, intend to leave the Navy.

Discrepancy Scores as Predictors

In the analyses thus far reported, we have looked at actual perceptions, that is, perceptions by respondents of how much of a particular factor they feel is present in their work situation. There remains, however, the possibility that not the actual amount, but the discrepancy of that actual amount from preferences, is the appropriate and most potent predictor. Stated otherwise, it may not be the actual amount of job challenge per se which leads a Navyman to reenlist, but the amount of challenge which he feels in relation to the amount of challenge which he wants which predicts more strongly. All of the leadership indices (supervisory, as well as peer) and the Non-economic and Economic Job Factors, as well as Life Style Factors, have present in the array of

survey measures preferred or ideal as well as actual measures. Respondents were asked to describe how "things are now," as well as "how they would like them to be." These two sets of measures were employed to generate discrepancy scores by a procedure of subtracting the actual level from the ideal, or preferred level, and adding a constant of 4. On the scale which results, the score of 4.00 indicates no discrepancy at all. Scores from 0 to 3.99 indicate a situation in which the actually experienced level of the factor exceeds the amount desired. Scores of 4.01 through 8.00 indicate the obverse situation, that is, where the level desired exceeds the level experienced.

Table 6 presents the results of correlating discrepancy scores thus obtained with reenlistment intention at the individual, group, and organizational levels. As before, in the case of the individual and group analyses multiple regression procedures have been employed, whereas, at the organizational level zero-order product-moment coefficients are presented. At the individual level, the resulting multiple correlation coefficients do not indicate greatly enhanced predictive capacity. Coefficients fall at, or below, the levels of the simple, actual predictors. In general, the relationships are, as we might expect, reflective of a positive relationship, that is, the more the ideal exceeds the actual, the more likely it is that the individual will return to civilian life. However, a few reverse discrepancy relationships appear in the total array. Within the category of Economic Job Factors, steady employment presents one such instance and, among Life Style Factors, the opportunity to serve one's country takes a negative form as well.

Table 6

RESULTS OF MULTIPLE REGRESSIONS FOR DISCREPANCY SCORE PREDICTORS, AT INDIVIDUAL, GROUP AND ORGANIZATIONAL LEVELS, AND OF ZEROORDER CORRELATIONS WITH CRITERION AT ORGANIZATIONAL LEVEL

			LEVEL			
	Individual	1	Group		Organization	
Measures	Sample 1	Sample 2	Sample l	Sample 2		
	Beta¹ p	Beta p	Beta p	Beta p	ر ا	
Intra-Group Interpersonal Processes	(R, $R_{adj} = .13, .06$.16, .11	.54, .48	.43, .34)		
	(N = 509)	(N = 524)	(N = 86)	(N = 93)		
Supv. Support	40.	-08	01	90.		
Supv. Goal Emphasis Supv. Work Facil.	08	05	00:	17		m
Supv. Intera. Facil.	.12 .05	80.		.44		01
Peer Support Peer Goal Emphasis	10	-05				2
Peer Work Facil.						
Peer Intera. Facil. Goal Integration	.04			80.	.41 .007	7
Non-Economic Job Factors	(R, R, 37, = .37, .35	.44, .43	.57, .50	.68, .84)		
	(N = 507)	(N = 518)	11	9		
Job Challenge	.15 .001	.13 .004				
No One to Boss Me		90				
Lots of Free lime Opp. to Control Life	. 16	. 11 01				ı
No Endless Referrals		04	30	- 01	. 23	
No ked lape Rules Not Constraining	.11.	90.				0 1
Prestigious Job		.07				-
rriendly reopie	50.	20.				

Table 6 (continued)

			LEVEL			
	Individual	al	Group		Organization	zation
Measures	Sample 1	Sample 2	Sample 1	Sample 2		
	Beta p	Beta p	Beta p	Beta p	٢	d
Economic Job Factors	(R, $R_{adj} = .26$, .25	.24, .23	.32, .28	.42, .40)		
	(N = 528)	(N = 528)	(N = 86)	(N = 93)		
Good Pay Steady Employment Good Fringe Benefits	.23 .0001	210001 13 .002 02	.32 .005	.26 .02 27 .008	.08	.002
Life Style Factors	(R, $R_{adj} = .23$, .22	.28, .27	.37, .34	.51, .49)		
	(N = 525)	(N = 517)	(N = 86)	(N = 93)		
Opp. to Serve Country Opp. to Make World Better Permits Stay One Place	11 .03 .21 .0001 .11 .01	12 .02 .23 .0001 .17 .0001	30 .009 .34 .003	12 .26 .02 .44 .0001	46 10 .29	.002

1 The significance levels of the β are computed on the basis of "t" which is the quotient of β divided by the standard error.

At the group level, much the same pattern presents itself: predictive capacity is little enhanced by the use of discrepancy scores. Significant results are obtained, to be sure, but in general such results do not replicate from one random half-sample to the other.

At the organizational level, the discrepancy score picture is both more interesting and more mixed. Clearly, discrepancy scores are better predictors at the organizational level than are their actual score counterparts. Of the eight leadership measures, six are better predictors in discrepancy score form, in some cases much better predictors than are actual scores for the same measures. Among the remaining job and life style factors, the results are rather mixed, as often better as worse.

To further clarify this picture, we present in Table 7 the ideal scores--that is, the other portion of the discrepancy scores--as predictors. We find, from these data, that organizational-level ideal scores alone are the best predictors. The direction of the relationship for those which are statistically significant is such that the higher the level of leadership the first-term Navy man desires, whether from supervisor or from peers, the more likely it is that he will leave the Navy, regardless of what he experiences on these dimensions in the course of his service.

This finding is quite perplexing. One possibility, of course, is that it reflects the effects of national issue postures of these same first-term enlisted men, a possibility which will be explored in the following section. Another possibility is that it reflects indirectly the attitudes and postures of supervisors, showing up in the present instance in the preference differences of those whom they supervise.

Table 7

RESULTS OF MULTIPLE REGRESSIONS FOR IDEAL PREDICTORS AT INDIVIDUAL AND GROUP LEVELS, AND OF ZERO-ORDER CORRELATIONS WITH CRITERION AT ORGANIZATIONAL LEVEL

		LEVEL	EL		
	Individual	lual	Group	dr	Organization
Measures	Sample 1	Sample 2	Sample l	Sample 2	
	Beta¹ p	Beta p	Beta p	Beta p	ر م
Intra-Group Interpersonal Processes	$(R, R_{adj} = .19, .15)$.14, .08 (N = 531)	.21, .20 (N = 86)	.31, .15) (N = 93)	
Supv. Support Supv. Goal Emphasis Supv. Work Facil. Supv. Intera. Facil. Peer Support Peer Goal Emphasis Peer Mork Facil. Peer Intera. Facil.	10 02 06 06 14 .03	01 03 07 07 07	04 24 24 25 21 21	04 02 08 01 35	.59 .0001 .58 .0001 .67 .0001 .65 .0001 .41 .008
Non-Economic Job Factors	(R, $R_{adj} = .33$, .31 (N = 521)	.24, .21 (N = 529)	.39, .25 (N = 86)	.52, .4 <i>E</i>) (N = 93)	
Job Challenge No One to Boss Me Lots of Free Time Opp. to Control Life No Endless Referrals No Red Tape Rules Not Constraining Prestigious Job Friendly People	06 .170001 .06 .13 .008 .02 .06 .16 .002	.03	02 20 10 16 16 06 05	01 15 25 15 15 15	.07 .08 .41 .25 09 .34 .04 .04

Table 7 (continued)

(R, R	Sample 1 S eta p Be dj = .19, .18 (N = 533)	Sample 2	Š			
Measures Economic Job Factors (R, Radj	۵	ole 2	aroup	dno	Organization	ion
	۵		Sample 1	Sample 2		
			Beta p	Beta p	2	Д
N)	= 533)	.20, .19	.35, .32	.27, .27)		
		(N = 538)	(98 = N)	(N = 93)		
Good Pay Steady Employment Good Fringe Benefits18	4 .002 4 8 .0001	.16 .001	.0335 .003	.17 15 23 .05	.29 .00 .48 .00	100.
Life Style Factors (R, $R_{adj} = .30$, (N = 530)	dj = .30, .29 (N = 530)	.34, .34 (N = 531)	.38, .35 (N = 86)	.53, .51) (N = 93)		
Opp. to Serve Country Opp. To Make World Better .03 Permits Stay One Place	9 .0001 3 3 .003	.28 .0001	42 .001	32 .009 05 .39 .0001	38 .01 22	2 5

1 The significance levels of the β are computed on the basis of "t" which is the quotient of β divided by the standard error.

This latter possibility requires, for its exploration, the matching of supervisors' responses with those of their subordinates, on analysis stratagem which is planned for the next phase of analysis, but is clearly beyond the scope of the present report.

Relationship to National Issue Measures

As the original proposal and reports prepared since its submission and approval indicate, the overall research study encompassed national issues measures as well as organizational and job perceptions. Preliminary findings in relation to these national issues have been summarized in a technical report (Bachman 1973). In an effort to determine the relationship which these national issue measures may, or may not, have to the organizational practices and preferences which are the focus of the present study, marker variables (obtained from presently ongoing factor analyses which are the subject of a forthcoming technical report by Bachman) were placed within the same type of analytic framework at the individual level previously used for the organizational measures. That is, random sample halves were employed in a multiple regression analysis using national issue marker measures as predictors. From the total array of such marker variables, successive subsets of best predictors were selected and the final subset was combined with the three previously identified best individual-level, organizational variable predictors in a joint multiple regression.

The results are presented as Appendix A to the present report. They indicate that a great deal of overlap exists between best national issue predictors of reenlistment intention and organizational predictors of that same

criterion. More specifically, the national issue measure entitled "Military Job Opportunity" appears to overlap in substantial measure the Human Resources Primacy index in the organizational array. When combined, the six predictors (three from the national issues array, three from the organizational array) do little better than either subset of three taken singly. For present purposes, therefore, it would appear that little, if any, additional predictive power is obtained by joining both sets of predictors (national issues measures and organizational practices and preferences) in a combined multiple regression.

Discussion and Conclusions

At the individual and group levels, the results of the present study are clear, straightforward, and reasonably simple. They indicate that there are vast differences in the intention to reenlist, differences which are seemingly closely tied to the work situation experienced by the first-term enlisted Navyman. The variables which describe situations which predispose Navymen toward reenlisting or leaving the service are in no way mysterious. They have, instead, to do with what, at least for some, are familar topics. They include the importance which his unit attaches to human resources, the amount of satisfaction that he experiences in his work, in his relations with the people around him, and in relation to his opportunities, the nature of the relationship which he has with his coworkers in terms of a cohesive versus a conflictful experience, and the opportunity to be the master of his own personal life.

Those who would argue that the all-volunteer, or no draft, situation is unmanageable or unlivable, on the grounds that necessary manpower cannot be obtained, or retained if in fact recruited, need only look at the statistics reflected in Figure 1, wherein a difference between most and least favorable situations described in the terms just mentioned is a difference of 54 to 1. Stated more simply, if the situations experienced by first-term enlisted Navymen were in general as favorable as those experienced by those whom we have labeled "category 6," over half of the first-term enlisted men would chose to remain in the Navy.

Unfortunately, of course, conditions are not that positive. Yet, as has been mentioned above, the situational conditions which would appear to predispose for, or if negative, against, reenlistment are not mysterious nor difficult ones. If retention is a criterion—and it must be kept in mind, of course, that it is but one of many criteria—the action steps explicit in the findings would appear to be the following:

1. Do those things calculated to demonstrate to the first-term enlisted Navyman that the Navy attaches importance to its personnel as human resources. More specifically, the Navy as an organization ought make certain that its policies and procedures convey in their form and in the behavior of those who interpret and administer them that the Navy has a real interest in the welfare and happiness of its first-term enlisted personnel. These policies and their behavioral interpretation by those subordinate echelons ought to be aimed at improving working conditions for the first-termer, as well as aimed at organizing his work activities in forms which are more sensible to him.

- Policies, procedures, and the behaviors that go with them, ought be those which enhance close, friendly relationships among Navymen, and reduce conflict.
- 3. Finally and perhaps most controversial, they ought permit the widest possible latitude or opportunity for the Navyman to control his personal life. Admittedly difficult for any organization whose behavior and appearance is constantly in the public eye, it may, nevertheless, amount in some instances to a choice between a Navy which is effective, though not necessarily consistent in appearance with standards of what is pleasing in the public eye, and a Navy, on the other hand, which though attractive is undermanned and, in fact, less effective.

Future research will attempt to identify those behaviors and characteristics which more clearly lead to the conditions identified in the present investigation. A search will be made for those behaviors and conditions more specifically associated with satisfaction, with the perception that importance is attached to human resources, and with the perception that one has, in fact, an opportunity to control one's personal life. For the moment, however, the general conclusion of the present report must be that desirable retention rates seem feasible and accomplishable, provided that the practices and conditions necessary for their attainment—for creating the kinds of situations conducive to retention—are acceptable and, in fact, implemented.

Appendix A

MULTIPLE REGRESSION RESULTS

PREDICTING REENLISTMENT INTENTION FROM NATIONAL ISSUE MARKER VARIABLES
AND ORGANIZATIONAL BEST PREDICTORS
(INDIVIDUAL LEVEL)

	NATI	NATIONAL ISSUE MARKER PREDICTORS	
Measures	Sample I	Sample 2	Total
	Beta¹ p	Beta p	Beta p
	$(R, R_{adj} = .40, .38$.44	.41
	(N = 504)	(N = 513)	(N = 1,017)
Military Job Opp. Unjust Trust Set Rights Military Leaders Are Smart Trust Military Leaders U.S. Mil. Power vs. U.S.S.R. U.S. Warl. Power vs. Others U.SWar to Protect Others U.SDefend Only U.S. Punish Draft Dodgers Grant Amnesty Obey Without Question Anti Vietnam	250000 04 03 03 09 04 09	18001 1202 1202 01 05 09 01	20 .0000 08 .02 06 .00 .07 .05 03 03

The significance lovels of the β are computed on the basis of "t" which is the quotient of z divided by the standard error.

Appendix A

MULTIPLE REGRESSION RESULTS
PREDICTING REENLISTMENT INTENTION FROM NATIONAL ISSUE MARKER VARIABLES
AND ORGANIZATIONAL BEST PREDICTORS
(INDIVIDUAL LEVEL)

	SUBSET	OF BEST NATIONAL ISSUE PREDICTORS	TORS
Measures	Sample I	Sample 2	Total
	Beta p	Beta p	Beta p
	(R, R _{adj} = .37, .36	.44	.40 .39)
	(N = 504)	(N = 513)	(N = 1,017)
Military Job Opp. Ideal Unjust Trust Set Rights	25 .0000		
Milliday Leaders Are Smart U.S. Mil. Power vs. Others U.S. Defend Only U.S. Obey Without Question			09002 0603 0801
	JOINT EFFECTS OF B	BEST NATIONAL ISSUE AND BEST ORGANIZATIONAL PREDICTORS	RGANIZATIONAL PREDICTORS
Measures	Sample I	Sample 2	Total
	Beta p	Beta p	Beta p
	(R, R _{adj} = .40, .39	.49	.44
	(N = 504)	(N = 513)	(N = 1,017)
Military Job Opp. Ideal U.S. Mil. Power vs. Others U.S. Defend Only U.S. Human Resources Primacy	11 .04 .12 .01 01	. 13 . 01 . 01 14 002	12 .001 .11 .0002 06 .02
Satisfaction Opp. To Control Per. Life	22 .0001		

APPENDIX B

Table B-1

CORRELATION OF BETA WEIGHTS ACROSS HALF-SAMPLES,
FOR INDIVIDUAL AND GROUP LEVELS

Level	Measures	Samples	r	N	
Individual	Organizational Climate	1x2	.68	5	
	Intra-Group Interpers. Processes	1x2	.91	10	.01
	Non-Economic Job Factors	1x2	.74	9	.05
	Economic Job Factors	1x2	.95	3	
	Life Style Factors	1x2	.78	4	
	All Measures	1x2	. 79	31	.01
	All Measures	3x4	.51	31	.01
Group					
(Greater than 1)	Organizational Climate	1x2	43	5	
	Intra-Group Interpers.	1x2	.53	10	
	Non-Economic Job Factors	1x2	. 86	9	.01
	Economic Job Factors	1x2	. 89	3	
	Life Style Factors	1x2	.63	4	
	All Measures	1x2	.00	31	

Table B-2

CROSS-VALIDATION OF STAGE 2 MULTIPLE REGRESSION RESULTS (DEPENDENT VARIABLE = REENLISTMENT INTENTION)

Independent Variable Cluster	Level	Original R = (Unadj)	Samples: Prediction Combination	r
Organizational Climate	Individual	. 35	1 -> 2	. 33**
		. 32	2> 1	. 30**
	Group	.55	1 → 2	. 34*
		.57	2 -> 1	.29*
Intra-Group Interpers. Processes	Individual	. 39	1 -> 2	.36**
110063363		. 37	2	. 33**
	Group	.54	1 2	.40**
		.66	2	.49**
Non-Economic Job	Indi vi dual	.40	1 -> 2	. 36**
Factors		.40	2	.37**
		. 59	1 2	.52**
	Group	.66	2	.62**
Economic Job Factors	Individual	. 30	1 -> 2	.27**
		. 40	2 1	.37**
	Group	.33	1> 2	.32*
		.52	2	.50**
Life Style Factors	Individual	.32	1 -> 2	. 31**
		.28	2> 1	.26**
	Group	. 45	1 2	.40**
		.52	2 1	.52**

^{*} Significant beyond .01 level of confidence

^{**} Significant beyond .001 level of confidence

Table B-3

CROSS-VALIDATION OF STAGE 5 MULTIPLE REGRESSION RESULTS (DEPENDENT VARIABLE = REENLISTMENT INTENTION)

Criterion from Sample	Original R (Unadjusted)	Samples: Prediction Combination	r
1	. 38	$2 \longrightarrow 1$ $3 \longrightarrow 1$ $4 \longrightarrow 1$. 38** . 37** . 37**
2	. 43	$ \begin{array}{c} 1 \longrightarrow 2 \\ 3 \longrightarrow 2 \\ 4 \longrightarrow 2 \end{array} $.43** .42** .43**
3	. 37	$ \begin{array}{c} 1 \longrightarrow 3 \\ 2 \longrightarrow 3 \\ 4 \longrightarrow 3 \end{array} $.37** .36** .35**
4	. 45	$ \begin{array}{c} 1 \longrightarrow 4 \\ 2 \longrightarrow 4 \\ 3 \longrightarrow 4 \end{array} $.44** .44** .43**

^{**} Significant beyond .001 level of confidence

References

- Bachman, J.G. <u>Values</u>, <u>Preferences and Perceptions Concerning</u>
 <u>Military Service</u>. Ann Arbor, Michigan, The University of Michigan, The Institute for Social Research, June, 1973.
- Bowers, D.G. <u>Values and their impact for Navy and civilian</u>
 <u>respondents</u>. Ann Arbor, Michigan, The University of Michigan,
 The Institute for Social Research, June, 1973.
- Drexler, J.A. and Bowers, D.G. Navy retention rates and human resources management. Ann Arbor, Michigan, The University of Michigan, The Institute for Social Research, May, 1973.
- McNemar, Q. <u>Psychological statistics</u>, fourth edition. John Wiley and Sons, Inc., New York, 1969.
- Michaelsen, L.K. A methodology for the studies of the impact of organizational values, preferences, and practices on the all-volunteer Navy. Ann Arbor, Michigan, The University of MVchigan, The Institute for Social Research, June, 1973.